CLAIMS

I claim:

1. A liquid pump for use with an electronic component cooling system comprising:

a housing;

a DC brushless spindle-motor mounted to said housing, said motor comprising an at least one rare-earth magnet for rotating an outer hub around a stationary shaft;

an impeller rotationally constrained to said hub, said impeller contained within said housing;

said housing having a fluid inlet for receiving a supply of lower pressure fluid and for delivering said supply of lower pressure fluid to said impeller, wherein rotation of said impeller transforms said supply of lower pressure fluid to a supply of higher pressure fluid; and

said housing having a fluid exit for dispensing said supply of higher pressure fluid.

2. The liquid pump of claim 1, wherein said impeller may axially float in relation to said hub.

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3. The liquid p	ump of claim 1,	wherein'	said im	neller is	s a centr	ifunal im	neller
o. The liquid p	amp or oralli i,	WHOTEH	Jaia IIII	poner R		nugai III	iheilet.
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4. The liquid p	ump of claim 1,	wherein	caid im	nellar id	. a turbir	a impal	lor
- The liquid p	unip or dann 1,	AALIGI CILI	Said IIII	hellet is	a lululi	ie iiiihei	-
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5. The liquid	pump of claim	1' where	in said	at leas	t onoire	ra_aarth	magna
	•		an salu	at Icas	. One la	1 C-Cal ((1	mayne
made from neod	dymium-iron-bo	ron.			•		
	•	. •				•	•
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6. The liquid	pump of claim	1, where	in said	at leas	t one ra	re-earth	magne
made from sam	arium-cobalt.			*	•		
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				•			
7. The liquid p	ump of claim 1	, wherein	said s	pindle-r	notor is	capable	of spee
over 3600 rotati	one per minute						·
Over 5000 foldti	ons per minute.						
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8. The liquid p	nump of claim	1 wherei	in caid	enindla	-motor b	126 AD 4	sutnut la
•	•	i, wilciel	iii salu	spii iulė	-motor f	iao dil (output 16
than 1/5 horsep	ower.						
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- 9. The liquid pump of claim 1, wherein said spindle-motor creates less than 2000 milliliters per minute of flow.
- 10. The liquid pump of claim 1, wherein said spindle-motor contains at least one magnetic seal between said stationary shaft and said hub.
- 11. The liquid pump of claim 1, wherein said spindle-motor contains a magnetic bearing.
- 12. A fluid pump for use within a liquid cooling system comprising:

an enclosure;

a DC brushless motor comprised of a stationary spindle, an at least one rare-earth magnet, and a hub for rotating about said stationary spindle, said stationary spindle fixed to said enclosure;

an impeller disk rotatably constrained to said hub of said motor;

said enclosure for housing said impeller disk including an inlet for providing a low pressure supply of fluid to said impeller disk;

	wherein rotation of said impeller disk transforms said low pressure supply
	of fluid to a higher pressure supply of fluid; and
	an exit in said housing for discharging said supply of higher pressure fluid.
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	13. The fluid pump of claim 12, wherein said inlet is fluidly connected to a liquid
	thermal management unit.
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•	14. The fluid pump of claim 12, wherein said liquid cooling system is a spray
	cooling liquid cooling system.
	15. The fluid pump of claim 12, wherein said exit is fluidly connected to a heat
•	exchanger of said liquid cooling system.
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	16. The fluid pump of claim 12, wherein said impeller disk is a centrifugal
·, ·	impeller.
	17. The fluid pump of claim 12, wherein said impeller disk is a turbine impeller.

19. The fluid numb of claim 12 wherein said at least one ware parth magnet is							
18. The fluid pump of claim 12, wherein said at least one rare-earth magnet is							
constructed from neodymium-iron-boron.							
19. The fluid pump of claim 12, wherein said at least one rare-earth magnet is							
constructed from samarium-cobalt.							
20. The fluid pump of claim 12, wherein said spindle-motor is capable of speeds							
over 3600 rotations per minute.							
21. The fluid pump of claim 12, wherein said spindle-motor contains at least one							
magnetic seal.							
22. The fluid pump of claim 21, wherein said at least one magnetic seal contains							
a dielectric cooling fluid used with said liquid cooling system.							
23. The fluid pump of claim 12, wherein said spindle-motor contains a magnetic							
bearing.							

- 24. The fluid pump of claim 12, wherein said spindle-motor has an output less than 1/5 horsepower.
- 25. The fluid pump of claim 12, wherein said spindle-motor creates less than 2000 milliliters per minute of flow.